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EXAMINER				
MALZAHN, DAVID H				
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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* WILLIAM W. MACY JR., ERIC L. DEBES, YEN-KUANG  
CHEN, and MINERVA M. YEUNG

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Appeal 2009-001737  
Application 10/612,592<sup>1</sup>  
Technology Center 2100

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Decided: January 11, 2010

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*Before* JOSEPH L. DIXON, JAY P. LUCAS, and JOHN A. JEFFERY,  
*Administrative Patent Judges.*

LUCAS, *Administrative Patent Judge.*

DECISION ON APPEAL

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<sup>1</sup> Application filed July 1, 2003. The present application is a continuation in part of U.S. Patent Application No. 09/952,891 filed October 29, 2001, now U.S. Patent No. 7,085,795. The real party in interest is Intel Corp. of California.

### STATEMENT OF THE CASE

Appellants appeal from a final rejection of claims 20-27 under authority of 35 U.S.C. § 134(a). The Board of Patent Appeals and Interferences (BPAI) has jurisdiction under 35 U.S.C. § 6(b). Claims 1-19 and 28-40 are indicated as being allowable (Ans. 2, middle).

We reverse the rejection.

Appellants' invention relates to a method and apparatus for performing parallel table lookups of data in a table. In the words of Appellants:

Method, apparatus, and program means for performing a parallel table lookup using SIMD instructions. The method of one embodiment comprises loading a table having a set of L data elements. A determination of whether the table fits into a single register is made. A data lookup into the table is performed with a packed data shuffle operation if the determination indicates that the table does fit into a single register. The table is divided into a plurality of sections if the table does not fit into a single register. Each of the sections is sized to fit into a single register. A plurality of packed data shuffle operations are executed on the plurality of sections to look up data in the table.

(Spec. 78).

Claim 20 is exemplary:

20. An article comprising a tangible machine readable medium that stores a program, said program being executable by a machine to perform a method comprising:

determining whether a table having a set of  
L data elements fits into a single register;

performing a data lookup into said table  
with a packed data shuffle operation if said  
determination indicates that said table does fit into  
a single register; and

dividing said table into a plurality of  
sections if said table does not fit into a single  
register, each of said sections sized to fit into a  
single register, and executing a plurality of packed  
data shuffle operations on said plurality of sections  
to look up data in said table.

#### REJECTION

The Examiner rejects the noted claims as follows:

R1: Claims 20-27 stand rejected under 35 U.S.C. § 101 because the  
claimed invention is directed to non-statutory subject matter.

Appellants contend that the claimed subject matter is statutory. The  
Examiner contends that the claims are directed to machine readable media  
that, according to the specification, includes transmission media which may  
be signals.

#### ISSUE

The issue is whether Appellants have shown that the Examiner erred  
in rejecting the claims under 35 U.S.C. § 101. The issue specifically turns  
on whether the recitation of “tangible machine readable medium that stores a

program” recites statutory subject matter when interpreted in light of the instant Specification.

### FINDING OF FACT

The record supports the following finding of fact (FF) by a preponderance of the evidence.

1. Appellants indicate that their machine-readable medium referred to in the noted claims includes, inter alia, “floppy diskettes, optical disks” and “carrier waves, infrared signals, digital signals, etc.” (Spec. 10, ¶ [0034]).

### PRINCIPLES OF LAW

A claim for computer instructions embodied in a signal only is not considered by this office to be statutory under 35 U.S.C. § 101. This policy has been confirmed by the Court of Appeals for the Federal Circuit in *In re Nuijten*, 500 F.3d 1346 (Fed. Cir. 2007). “A transitory, propagating signal like Nuijten’s is not a ‘process, machine, manufacture, or composition of matter.’ Those four categories define the explicit scope and reach of subject matter patentable under 35 U.S.C. § 101; thus, such a signal cannot be patentable subject matter.” *Id.* at 1359.

## ANALYSIS

*Arguments with respect to the rejection  
of claims 20 to 27  
under 35 U.S.C. § 101 [R1]*

The current law has clear guidelines. In *Nuijten*, physical but transitory forms of signal transmission, such as radio broadcasts, electric signals through a wire, and light pulses through a fiber-optic cable were held to be non-statutory subject matter. “We hold that such transitory embodiments are not directed to statutory subject matter.” (*Nuijten*, 500 F.3d at 1357).

In the instant Specification, Appellants list a number of types of machine readable media on which their programs may reside, including forms of propagated signals on carrier waves. (§ [0034]). However, we find the instant claims to be limited to tangible machine readable media that store a program. (Claim 20). We find that the recited storage limitation, even though it is in the preamble, limits the claim environment to the non-transitory embodiments disclosed in Appellants’ Specification; and the tangible limitation further excludes the pure carrier signal embodiments.

We are thus left with the claim encompassing only the non-transitory embodiments that satisfy the requirements for a manufacture, which is one of the four statutory classes of invention.

## CONCLUSIONS OF LAW

Based on the findings of facts and analysis above, we conclude that the Examiner erred in rejecting claims 20-27.

DECISION

The Examiner's rejection of claims 20-27 is reversed.

REVERSED

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